

Notice of Allowability

Application No.

09/356,845

Applicant(s)

KAEWELL JR. ET AL.

Examiner

Art Unit

Tesfaldet Bocure

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/27/04.
2. ☒ The allowed claim(s) is/are 11,13-23,25-27 and 29-32, renumbered as 1-19.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

TESFALDET BOCORE
PRIMARY EXAMINER

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Jeff Glabicki (Reg.# 42,584) on April 4, 2006.

The application has been amended as follows:

In the claims

Claim 11 has been rewritten with the added (underlined) and cancelled limitations as follows:

A telecommunication system using wireless transmissions, the system comprising:

a primary station communicating with a first plurality of stations, the primary station including a radio having a receiver and a transmitter wherein:

(i) said transmitter transmits primary station synchronization information including an assignment of n transmission fixed periodic time slots to a plurality of subscriber units of the first plurality of stations, where n is an integer greater than 1, and n reception fixed periodic time slots on a selected frequency, said assignment of time slots resulting in each of said plurality of subscriber units assigned a separable slot;

(ii) said radio transceives a duplex telephonic communication with the first plurality of subscriber units ~~stations~~ on the selected frequency wherein:

(a) said transmitter transmits first speech information in a respective one of the n transmission time slots on the selected frequency; and

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(b) said receiver receives second speech information from each of the first plurality of subscriber units ~~stations~~ in one of the n reception time slots on the selected frequency and receiving base station synchronization information from a base station, wherein a transmit and receive timing of the primary station is synchronized to the base station using the base station synchronization information; and

the first plurality of stations including:

the base station communicating with a second plurality of stations, the base station receiving from the primary station the first speech information originated from one of the first plurality of stations ~~a secondary station~~ in said respective transmission time slot and transmitting the second speech information in said respective reception time slot, the base station transmitting the base station synchronization information; and

each of the subscriber units ~~the secondary station~~ having:

(i) a radio receiver which receives the primary station synchronization information from the primary station and identifies the assignment of time slots and which receives from the primary station the first speech information originating from the base station in said respective transmission time slot, wherein a transmit and receive timing of the secondary station is synchronized to the primary station using the primary station synchronization information; and

(ii) a radio transmitter which transmits the second speech information in said respective reception time slot; and

(iii) each of said plurality of subscriber units ~~secondary stations~~ finds the transmissions and slots assigned to that subscriber unit ~~secondary station~~;

wherein using the primary station for transmissions between the base station and subscriber units ~~secondary station~~ is transparent to the base station and subscriber units ~~secondary station~~, and the primary station and the subscriber units themselves ~~detect~~ ~~secondary station itself detects~~ a frame timing from received signals and aligns its transmitting frame timing accordingly.

Claim 14 has been rewritten with the added (underlined) and cancelled limitations as follows:

A telecommunication system according to claim 11 wherein the subscriber units ~~are secondary station~~ is positioned outside an operating range of said base station at a remote location whereat direct communication with said base station can not be made.

Claim 15 has been rewritten with the added (underlined) and cancelled limitations as follows:

A telecommunication station for communicating with a base station and a secondary station using wireless transmissions, the base station communicating with a plurality of stations, the telecommunication station comprising:

a transmitter which:

(i) transmits telecommunication station synchronization information including the assignment of $2n$ fixed periodic time slots to a plurality of subscriber units including the secondary station, where n is an integer greater than 1, on a selected frequency, n fixed periodic transmit time slots for transmission from said telecommunication station and n fixed periodic reception time slots for reception by said telecommunication station, the telecommunication station synchronization information enabling a transmit and receive timing of the secondary station to be synchronized to the telecommunication station, said assignment of time slots resulting in each of said plurality of subscriber units assigned a separable slot; and

(ii) transmits TX information to the base station and the secondary station on the selected frequency in respective ones of said n assigned transmit slots, the receiver receiving base station synchronization information to synchronize a transmit and reception timing of the telecommunication station to the base station; and

a receiver which receives RX information from the base station and the secondary station on the selected frequency in respective ones of said n assigned

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reception slots and receives synchronization information from the base station, the receiver receiving base station synchronization information to synchronize a transmit and reception timing of the telecommunication station to the base station

wherein using the telecommunication station for communications between the base station and secondary station is transparent to the base station and secondary station, and the telecommunication ~~primary~~ station and the secondary station itself detects a frame timing from received signals and aligns its transmitting frame timing accordingly; and

each of said plurality of secondary stations finds the transmissions and slots assigned to that secondary station.

Claim 19 has been rewritten with the added (underlined) and cancelled limitations as follows:

A telecommunication station for communicating with a base station and a secondary station using wireless transmissions, the base station communicating with a plurality of stations, the telecommunication station comprising:

a transmitter which:

(i) transmits telecommunication station synchronization information including the assignment of fixed periodic time slots to a plurality of subscriber units including the secondary station on a selected frequency, at least two fixed periodic transmit time slots for transmission from said telecommunication station and at least two fixed periodic reception time slots for reception by said telecommunication station, wherein the telecommunication station synchronization information enables a transmit and receive timing of the secondary station to be synchronized to the telecommunication station, said assignment of time slots resulting in each of said plurality of subscriber units assigned a separable slot; and

(ii) transmits a signal carrying information received from the base station on the selected frequency in a first assigned transmit slot and carrying information received from the secondary station on the selected frequency in a second assigned transmit slot; and

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a receiver which:

(i) receives the information transmitted from the base station on the selected frequency in a first assigned reception slot and base station synchronization information from the base station, wherein a timing of the secondary station is synchronized to the telecommunication station using the telecommunication station synchronization information; and

(ii) receives the information transmitted from the secondary station on the selected frequency in a second assigned reception slot; and

(iii) each of said plurality of subscriber units ~~secondary stations~~ finds the transmissions and slots assigned to that subscriber unit ~~secondary station~~;

wherein using the telecommunication station for communications between the base station and secondary station is transparent to the base station and secondary station, and the telecommunication ~~primary~~ station and the secondary station itself detects a frame timing from received signals and aligns its transmitting frame timing accordingly.

Claim 29 has been rewritten with the added (underlined) and cancelled limitations as follows:

A telecommunication station according to claim 15 wherein the telecommunication ~~primary~~ station equalizes base station communications prior to retransmission to the secondary station.

Claim 31 has been rewritten with the added (underlined) and cancelled limitations as follows:

A telecommunication station according to claim 19 wherein the telecommunication ~~primary~~ station equalizes base station communications prior to retransmission to the secondary station.

Remarks:

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2. The above Amendment was mailed to the Examiner in which agreed upon to correct the 112 second paragraph raised by the Examiner during the telephone interview initiated by the Examiner.

Reasons for Allowance:

3. See child application serial number 09/791,259 for Board of Appeal's decision reversed Examiner rejection for broader claim than the current Application

Conclusion

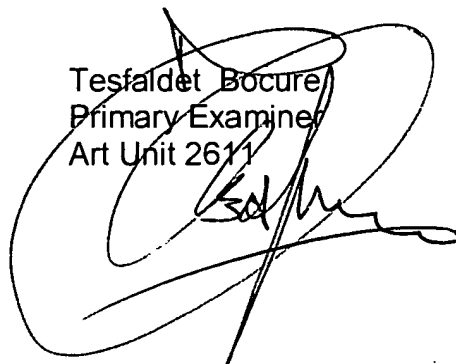
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tesfaldet Bocure whose telephone number is (571) 272-3015. The examiner can normally be reached on Mon-Thur (7:30a-5:00p) & Mon.-Fri (7:30a-5:00p).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jayanti (Jay) Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tesfaldet Bocure
Primary Examiner
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A large, stylized handwritten signature in black ink, which appears to be 'Tesfaldet Bocure', is written over the printed name and title.

T.Bocure